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| APPLICATION NO.                | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--------------------------------|-----------------------|----------------------|----------------------|------------------|
| 10/517,731                     | 12/08/2004            | Claude Chapel        | PF020064             | 6035             |
| Joseph S Trip                  | 7590 10/15/200<br>oli | 9                    | EXAM                 | IINER            |
| Thomson Licensing Inc          |                       |                      | RUTKOWSKI, JEFFREY M |                  |
| Patent Operati<br>P O Box 5312 |                       |                      | ART UNIT             | PAPER NUMBER     |
| Princeton, NJ 08543-5312       |                       |                      | 2473                 |                  |
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|                                |                       |                      | MAIL DATE            | DELIVERY MODE    |
|                                |                       |                      | 10/15/2009           | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

| Application No.      | Applicant(s)  |  |
|----------------------|---------------|--|
| 10/517,731           | CHAPEL ET AL. |  |
| Examiner             | Art Unit      |  |
| JEFFREY M. RUTKOWSKI | 2473          |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

| Period fo  | r Reply  |
|--|--|
| WHIC<br>- Extensiafter S<br>- If NO<br>- Failund<br>Any re | DRIENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, HEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. assons of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed SIX (6) MONTHS from the mailing date of this communication. The state of the communication of the |
| Status   |  |
| 1)🛛  | Responsive to communication(s) filed on 13 July 2009.  |
| 2a)□   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |
| Dispositio   | on of Claims   |
| 4)🛛  | Claim(s) <u>4-9 and 12</u> is/are pending in the application.  |
|  | a) Of the above claim(s) is/are withdrawn from consideration.  |
| 5)   | Claim(s) is/are allowed.   |
|  | Claim(s) <u>4-9 and 12</u> is/are rejected.  |
|  | Claim(s) is/are objected to.   |
| 8)[_]  | Claim(s) are subject to restriction and/or election requirement.   |
| Application  | on Papers  |
| 9) 🔲 7   | The specification is objected to by the Examiner.  |
| 10)[   | Γhe drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |
|  | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |
| 11) 🔲 🗆  | The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |
| Priority u   | nder 35 U.S.C. § 119   |
| 12) 🗌 🗸  | Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |
| a)[  | All b) Some * c) None of:  |
|  | <ol> <li>Certified copies of the priority documents have been received.</li> </ol>   |
|  | 2. Certified copies of the priority documents have been received in Application No   |
|  | 3. Copies of the certified copies of the priority documents have been received in this National Stage<br>application from the International Bureau (PCT Rule 17.2(a)).   |
| * S  | ee the attached detailed Office action for a list of the certified copies not received.  |
|  |  |
| Attachment   | (s)  |
| _  | e of References Cited (PTO-892) 4) Interview Summary (PTO-413)   |

 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/SE/CS) Paper No(s)/Mail Date \_\_\_\_\_

Paper No(s)/Mail Date.

5) Notice of Informal Patent Application.

6) Other:

Part of Paper No./Mail Date 20091008

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#### DETAILED ACTION

Claims 1-3 and 10-11 have been cancelled.

## Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/13/2009 has been entered.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 4-9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what corresponding structure is used to provide the means for managing the introduction or withdrawal of new gateway modules.

## Examiner's Note

 Claim 9 is presented first in the following rejection because it is the only independent claim and all the other pending claims are dependent from this claim.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu et al. (US Pat 6,505,255), hereinafter referred to as Akatsu, in view of Foley (US Pg Pub 2001/0012319) and Movshovich et al. (US Pat 6,434,170), hereinafter referred to as Movshovich.
- 8. For claim 9, Akatsu discloses external data sources (items 582, 586 and 592, see figure 5), a local area network connecting peripherals (IEEE 1394 network 568), a gateway (item 504) for establishing connections between the local area network and the external data sources (the gateway bridges the external networks and the IEEE 1394 network, see figure 5 and col. 6 lines 40-55).
- 9. Akatsu discloses a network where the peripeherals are chained together via serial IEEE 1394 connections (see figure 5). In Akatsu's architecture, there exists a hierarchical set of gateways with a central gateway. For example, the computer 524 acts as a gateway for chain 2 and the TV 508 acts as a gateway for chain 1. The home gateway 504 is a gateway for each chain. Akatsu does not disclose the use of a scalable gateway. Foley discloses the gateway being scalable such that the gateway is distributed among some peripherals called gateway

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modules (gateway functionality is distributed among conventional network clients in a network, see paragraphs 0113-0114), the gateway modules being chained together (figure 5 of Akatsu shows that the network clients or peripherals are chained together. Also, Foley discloses the distributed gateways are chained together via POTS wiring 1607, see paragraph 0113). It would have been obvious to a person of ordinary skill in the art at the time of the invention to distribute gateway functionality to some of the nodes in Akatsu's invention to increase the overall throughput of the network by reducing the number of hops in the network via removing the need for the home gateway 504 (Foley, paragraph 0113).

- 10. The combination of Akatsu and Foley discloses each gateway module comprising means for managing introduction or withdrawal of new gateway modules (Akatsu's 1394 driver 820, see col. 8 lines 62-68), each gateway module comprising means to establish the complete connection between the local area network and the external data source independently of whether other gateway modules have established a connection with an external source (Foley's distributed virtual gateway 1401 suggests each client that incorporates the gateway functionality is essentially an independent gateway since there is no signaling among nodes that implement the virtual gateway 1401, see paragraphs 0094 and 0112-0114), wherein each gateway module handles a plurality of isochronous channels on the local area network (Akatsu's IEEE 1394 driver 820 is used to handle isochronous connections, see col. 8 lines 62-63 and col. 9 lines 60-65).
- 11. The combination of Akatsu and Foley discloses the use of gateway modules. Akatsu discloses the home gateway has functionality for MPEG filtering (see col. 8 line 55). Akatsu discloses part of the home gateway functionality is to manage incoming MPEG transport streams

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(see col. 11 lines 39-46). Akatsu does not disclose the use of a means for controlling.

Movshovich discloses the means for controlling incoming data from a multiple program transport stream received from one external data source according to one request of a peripheral on the local area network and for sending the incoming data received from the one external data source to the local area network in order to reduce bandwidth occupation on the local area network (demultiplexer 200 determines which transport packets are not part of the desired program. Packets that are not part of the desired program are discarded, which reduces bandwidth occupation. Packets that are part of the desired program are transmitted for further processing, see col. 7 lines 35-46). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Movshovich's demultiplexer in Akatsu's invention to enhance the distribution of multimedia information in the network (Movshovich, abstract).

- 12. For claim 5, Akatsu does not disclose the removal of packets from a MPTS. Movshovich discloses only packets that have a matching PID (packets that were requested) are forwarded by the PID match unit 314, allowing a Single Program Transport Stream (SPTS) be formed from the Multi-Program Transport Stream (MPTS) [col. 6 lines 40-45, col. 7 lines 26-47, figure 3]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Movshovich's demultiplexer in Akatsu's invention to enhance the distribution of multimedia information in the network [Movshovich, abstract].
- For claim 7, Akatsu discloses the local area network is compliant with IEEE-1394 protocol (item 568 of figure 5).
- For claim 8, Akatsu does not disclose the use of Digital Video Broadcasting (DVB).
   Movshovich's demultiplexer is used in DVB applications [col. 6 lines 60-64]. It would have

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been obvious to a person of ordinary skill in the art at the time of the invention to use

Movshovich's demultiplexer in Akatsu's invention to enhance the distribution of multimedia information in the network [Movshovich, abstract].

- 15. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu in view of Movshovich and Foley, as applied to claim 9 above, and further in view of Kubota et al. (US Pat 6,353,613), hereinafter known as Kubota.
- 16. The combination of Akatsu, Movshovich and Foley does not teach a means for updating or a means for inserting. Kubota teaches the means for updating signalization tables by disclosing a controller unit 25 generates additional Program Specific Information (PSI) and Service Information (SI) on respective programs based upon packet identifier (PID). The controller 25 then generates a Program Map Table showing the PID values of the audio and video data [col. 7 lines 17-34] (means for updating signalization tables comprised in the incoming data). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use Kubota's PMT table in Akatsu's invention to list all the PIDs for packets containing elements of a particular program.
- 17. Kubota also teaches the means for inserting modified signalization table limitation by disclosing the controller 25 also packets and outputs the generated PMT table [col. 7 lines 17-34] (means for inserting the modified signalization tables in the stream sent to the local area network). It would have been obvious to a person of ordinary skill in the art at the time of the invention to packet and transmit the PMT table according to Kubota to allow other devices to locate the respective video and audio information.

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 Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu in view of Movshovich and Foley, as applied to claim 9 above, and further in view of Hoffberg (US Pat 6.850.252).

- 19. For claim 6, the combination of Akatsu, Movshovich and Foley does not teach a means to guarantee copy protection. Hoffberg teaches an intelligent electronic appliance [abstract] that can be used to aid in copy protection, serial copy management and a pay-per-view royalty collection system [col. 160 lines 8-11]. The copy protection is provided via anti-copy encryption [col. 170 lines 20-30] (wherein it has means to guarantee a copy protection of the data coming from the external source). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use an intelligent device with copy protection functionality in Akatsu's invention to keep users from pirating copyrighted materials.
- Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu in view of
  Foley and Movshovich as applied to claim 9 above, and further in view of Coupe et al. (US Pg
  Pub 2002/0067718), hereinafter referred to as Coupe.
- 3. For claim 12, the combination of Akatsu, Foley and Movshovich disclose a demultiplexer 200 that contains a PID match unit 314 (Movshovich, col. 7 lines 40-45). The combination of Akatsu, Foley and Movshovich does not disclose the use of a means for filtering. Coupe discloses a PID filter 14 (means for filtering) that is used in the creation of a partial transport data stream [0030]. The PID filter 14 removes unwanted packets from an incoming data stream, leaving gaps in the partial transport stream [0027, 0030]. Since the partial transport stream has gaps, Coupe suggests the packets of the partial stream occupy the same temporal location as corresponding packets in the multiple transport stream. It would have been obvious

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to a person of ordinary skill in the art at the time of the invention to use Coupe's PID filter in

Akatsu's invention to remultiplex a filtered content stream with new data in real-time [Coupe,
title].

## Response to Arguments

Applicant's arguments with respect to claims 4-9 and 12 have been considered but are
moot in view of the new ground(s) of rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Jeffrey M Rutkowski/ Examiner, Art Unit 2473

/KWANG B. YAO/

Supervisory Patent Examiner, Art Unit 2473